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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/992,455	11/26/2001	Donald L. Mobley	8266-0740	7793

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EXAMINER

SY, MARIANO ONG

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 02/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/992,455

Applicant(s)

MOBLEY ET AL.

Examiner

Mariano Sy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11 and 13-15 is/are allowed.
- 6) ☒ Claim(s) 1-10, 12 and 21-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. The amendment filed on December 22, 2003 has been received.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 21-27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "both holes are configured to receive a movable shaft" in line 11. It is unclear as to how the movable shaft can be installed through both holes: a hole in the base frame being aligned with a hole in the first external side wall of the caster mounting tube. It appears that a missing second hole, align with the first set of holes, is needed on the external side wall opposite the first external side wall of the caster mounting tube.

Claim 25 recites the limitation "a second opening configured to receive a movable shaft" in line 2. How the movable shaft operates or function? It is unclear if the movable shaft goes through only on the second opening of the caster mounting tube. Where does the second opening located with respect to the caster mounting tube? Is it only on one external side wall of the mounting tube and no hole on the base frame?

Claim 26 recites the limitation "forming a shaft opening in the mounting tube, and inserting a movable shaft into the shaft opening". How the movable shaft operates or

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function? It is unclear where does the shaft opening located with respect to the mounting tube. Is it only on one external side wall of the mounting tube and no hole on the base frame?

Claims 22-24 and 27 are indefinite due to dependency to claim 21.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-4, 8, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reichow et al. (U.S. Patent Number 5,269,388) in view of Hall (U.S. Patent Number 5,330,064).

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Re-claims 1-3, 8 and 10 Reichow et al. discloses, as shown in fig. 1-2, a patient support apparatus comprising: a bed frame 16, a patient support 12 coupled to the bed frame, a plurality of casters 45, and a plurality of caster mounting tubes, each mounting tubes including a plurality of external side walls surrounding an opening, wherein each caster mounting tube is coupled to the bed frame.

However Reichow et al. fail to disclose the plurality of mounting tubes has a rectangular outer cross-sectional shape defined by four external side walls wherein each mounting tube is coupled to the base frame by welds located at opposite ends of the external side wall.

Hall teaches, as shown in fig. 1-2, the use of a plurality of casters 50 on a support frame each having a sleeve 54, a plurality of rectangular caster mounting tubes 40, 44, each mounting tube including a plurality of external side walls surrounding an opening, each external side walls having an interior surface facing inwardly toward the opening, the interior surface being configured to receive in abutting relationship with the sleeve of the caster, and the mounting tube being connected to base frame by welds disclosed in col. 4, lines 55-57 and see "239" in fig. 5.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the caster support structure of Reichow et al. to include a rectangular sleeve and caster mount tube welded to the base frame, as taught by Hall see col. 3 line 1, in order to improve the strength of the support, i.e. caster.

Re-claim 4 Reichow et al., as shown in fig. 1-2, the external side wall abutting the base frame, but fails to show the base frame is formed to include a hole aligned to a

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hole in the external side wall abutting the base frame and both holes are located between the welds.

Hall teaches, as shown in fig. 1-2, a first external side wall attached to the base frame by welding or riveting as disclosed in col. 4, lines 55-57. Hall discloses the limitation directed to the holes in the claim. The examiner takes Official Notice that it is old and well known to use rivets and welding together to better align and secure the two parts of a device. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used rivets and welds to secure the mounting tube and base frame into the apparatus of Reichow et al., in view of the teaching of Hall in order to more securely attach the mounting tube to the base frame so as to better support the weight of the apparatus.

7. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reichow et al. in view of Hall as applied to claim 1 above, and further in view of Wisecarver (U.S. Patent Number 3,880,394) and Stosberg et al. (U.S. patent Number 3,705,438).

Re-claims 5 and 6 Reichow et al. as modified fail to disclose wherein the sleeve of the caster has a cylindrical shape and the plurality of caster mounting tubes each include interior partially cylindrical concave wall sections to receive the cylindrical sleeve and also includes a corner notch located between concave wall sections.

Wisecarver teaches, as shown in fig. 1-3, the use of a square mounting tube 1 and bushing 6 of cylindrical interior fixed in the square mounting tube.

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Stosberg et al. teaches, as shown in fig. 1, a caster sleeve 16 having a cylindrical shape.

One skill in the art would have modify the square mounting tube with a square interior wall of Hall to an interior cylindrical wall to receive a cylindrical sleeve, in view of the teachings of Wisecarver and Stosberg et al., by using a cylindrical bushing fixed to the square interior wall of square tubing. The examiner takes Official Notice that it is old and well known of using a square tubing with a thick wall by cutting a cylindrical cross-section through the square interior wall to receiving a cylindrical sleeve of a caster, is a matter of design choice that have the same intended function of sliding freely and large bearing areas between the mounting tube and the sleeve, depending upon cost and availability of material during manufacturing.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reichow et al. in view of Hall and Stosber et al.

Re-claim 7 Reichow et al. discloses, as shown in fig. 1-2, a patient support apparatus comprising: a bed frame 16, a patient support 12 coupled to the bed frame, a plurality of casters 45, and a plurality of caster mounting tubes, each mounting tubes including a plurality of external side walls surrounding an opening, wherein each caster mounting tube is coupled to the bed frame.

However Reichow et al. fail to disclose the plurality of mounting tubes has a rectangular outer cross-sectional shape defined by four external side walls wherein each mounting tube is coupled to the base frame by welds located at opposite ends of

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the external side wall and caster mounting tubes each include an opening to receive a set screw.

Hall teaches, as shown in fig. 1-2, the use of a plurality of casters 50 having a sleeve 54, a plurality of square mounting tubes 44 including a first external side wall attached to the base frame by welding or riveting as disclosed in col. 4, lines 55-57. Hall discloses the limitation directed to the holes in the claim. The examiner takes Official Notice that it is old and well known to use rivets and welding together to better align and secure the two parts of a device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used rivets and welds to secure the mounting tube and base frame into the apparatus of Reichow et al., in view of the teaching of Hall in order to more securely attach the mounting tube to the base frame so as to better support the weight of the apparatus.

Stosberg et al. teaches, as shown in fig. 1, a caster mounting tube 24 includes an opening to receive a set screw 25.

It would have been obvious to one of ordinary skill in the art to have merely utilized the known set screw into the apparatus of Reichow et al., in view of the teaching of Stosberg et al., in order to orient the caster with respect to the mounting tube in position and avoid the caster from falling off.

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9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reichow et al. in view of Hall as applied to claim 1 above, and further in view Stosberg et al. (U.S. patent Number 3,705,438).

Reichow et al. as modified fail to disclose wherein the sleeve of each caster has a cylindrical shape.

It would have been obvious to one of ordinary skill in the art to have utilize a sleeve of a caster that has a cylindrical shape, in view of the teaching of Stosberg et al., since it is within the general skill in the art to make a change in the form or shape on the basis of its suitability for intended use as a matter of obvious design choice. In re Dailey, 149 USPQ47 (CCPA 1976).

10. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hall in view of Wisecarver and in view of Stosberg et al.

Re-claim 12 Hall discloses, as shown in fig. 1-2, a method for attaching a caster 50 having a tubular sleeve to a base frame, the method comprising the steps of: providing a caster having a sleeve 54, a square mounting tube 44, and a bed frame 28; placing a first side wall of the mounting tube against the base frame; welding the mounting tube to the base frame at opposite ends of the first side wall, see col. 4, lines 55-57; installing the sleeve of the caster into interior opening of the mounting tube.

Hall was silent to disclose a base frame of a bed. The examiner takes Official Notice that beds with base frame having casters are old and well known.

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It would have been obvious to one of ordinary skill in the art to use the base frame of Hall to support a bed in order to increase the mobility of the bed.

Hall fails to disclose forming an interior opening of the mounting tube having a round cross-sectional shape to receive the cylindrical sleeve of the caster; and forming an opening in the mounting tube to receive a set screw to orient the caster.

Wisecarver teaches, as shown in fig. 1-3, the use of a square mounting tube 1 and bushing 6 of cylindrical interior fixed in the square mounting tube.

Stosberg et al. teaches, as shown in fig. 1, a caster sleeve 16 having a cylindrical shape and a caster mounting tube 24 includes an opening to receive a set screw 25.

One skill in the art would have modify the square mounting tube with a square interior wall of Hall to an interior cylindrical wall to receive a cylindrical sleeve, in view of the teachings of Wisecarver and Stosberg et al., by using a cylindrical bushing fixed to the square interior wall of square tubing. The examiner takes Official Notice that it is old and well known of using a square tubing with a thick wall by cutting a cylindrical cross-section through the square interior wall to receiving a cylindrical sleeve of a caster, is a matter of design choice that have the same intended function of sliding freely and large bearing areas between the mounting tube and the sleeve, depending upon cost and availability of material during manufacturing and in order to orient the caster with respect to the mounting tube in position and avoid the caster from falling off.

11. Claims 11 and 13-15 are allowed.

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12. Applicant's arguments filed December 22, 2003 have been fully considered but they are not persuasive.

Examiner maintains the rejection is proper.

Applicant's argument regarding claim 1 "abutting relationship" can be broadly read as "lie adjacent" according to The American Heritage Dictionary, Second College Edition. Applicant did not specify a direct contact between mounting tube and caster sleeve; even so Hall '064 disclosed a direct contact between mounting tubes 40, 44 and caster sleeve 54. There was a typographical error by Examiner referring mounting tubes that should be as elements 40, 44.

Applicant's argument regarding claim 7, page 12 of Remarks that "Stosberg et al. '438 fails to overcome this deficiency, since there is no hint or suggestion in this reference of providing the set screw in combination with welds adjacent the generally planar first external side wall. Examiner disagrees since claim 7 failed to disclose "providing the set screw in combination with welds adjacent the generally planar first external side wall. Applicant's argument is more specific than the claim language.

Applicant's argument regarding claim 12, that Wisecarver '394 is non-analogous art. Examiner disagrees since Wisecarver '394 teaches a type of connector using a cylindrical bushing fixed to square interior of square tubing to receive a round rod to support a load. Modifying Hall's mounting tube with a square interior wall to a cylindrical wall to receive a cylindrical sleeve is a type of connector to support a load, i.e. bed frame. It would have been obvious to one of ordinary skill in the art to make a change in

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shape on the basis of suitability for the intended use as a matter of design choice. In re Dailey, 149 USPQ 47 (CCPA 1976). The word "forming" is a relatively broad term.

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariano Sy whose telephone number is 703-308-3427. The examiner can normally be reached on Mon.-Fri. from 9:00 A.M. to 3:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder, can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

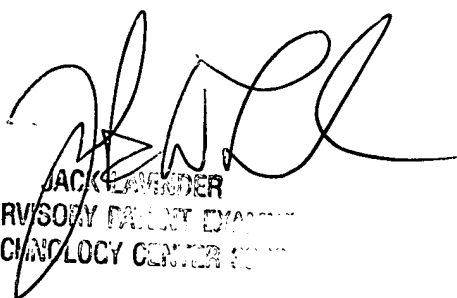
you have questions on access to the Private PAIR system, contact the Electronic

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msy

M. Sy

February 2, 2004


JACK LAVENDER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3683